Calamovilfa longifolia - Andropogon hallii Herbaceous Vegetation

COMMON NAME Prairie Sandreed - Sand Bluestem Herbaceous Vegetation

SYNONYM Prairie Sandreed - Sand Bluestem Prairie

PHYSIOGNOMIC CLASS Herbaceous vegetation (V)

PHYSIOGNOMIC SUBCLASS Perennial graminoid vegetation (V.A)

PHYSIOGNOMIC GROUP Temperate or subpolar grassland (V.A.5)

PHYSIOGNOMIC SUBGROUP Natural/semi-natural (V.A.5.N)

FORMATION Tall sod temperate grassland (V.A.5.N.a.)

ALLIANCE *Calamovilfa longifolia* Herbaceous Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Upland

RANGE
Globally
This community is found in eastern Montana, western Nebraska, South Dakota, North Dakota, southern Saskatchewan, and southern Manitoba.

Agate Fossil Beds National Monument
This community occurs throughout the Monument.

ENVIRONMENTAL DESCRIPTION
Globally
This community is found on sandy deposits, usually on gentle to moderate slopes (Johnston 1987). The soil is sand, loamy sand, or sandy loam and often erodible. Hirsch (1985) reported that stands of this type in southwestern North Dakota were small, generally less than 400 m^2.

Agate Fossil Beds National Monument
This community occurs primarily on lower slopes and in valley bottoms. Soils are mostly fine sands and loamy fine sands.

MOST ABUNDANT SPECIES
Globally

Stratum	Species
Herbaceous	*Andropogon hallii*, *Bouteloua gracilis*, *Calamovilfa longifolia*, *Stipa comata*

Agate Fossil Beds National Monument

Stratum	Species
Herbaceous	*Andropogon hallii, Artemisia frigida, Bouteloua gracilis, Calamovilfa longifolia, Helianthus petiolaris, Sporobolus cryptandrus, Stipa comata*

DIAGNOSTIC SPECIES
Globally
Calamovilfa longifolia, *Andropogon hallii*

Agate Fossil Beds National Monument
Calamovilfa longifolia, Erigeron bellidiastrum, Mirabilis hirsuta, M. linearis, Stipa comata, Tradescantia occidentalis

VEGETATION DESCRIPTION
Globally
This community is dominated by moderately widely spaced midgrasses. Hirsch (1985) found that bare ground and litter covered 84-93% of the ground in 4 stands in southwestern North Dakota. The most abundant species is *Calamovilfa longifolia*. *Andropogon hallii* is common to co-dominant. Other graminoids that may be found in this community include *Schizachyrium scoparium*, *Carex eleocharis*, *C. filifolia*, *C. inops* ssp. *heliophila*, *Stipa comata*, *Koeleria macrantha*, *Muhlenbergia pungens*, and *Bouteloua gracilis*. Forbs and shrubs are a minor component of the total vegetation. *Psoralidium lanceolatum*, *Liatris punctata*, *Lithospermum incisum*, *Lappula occidentalis* var. *occidentalis*, and *Lygodesmia juncea* may occur in this community. *Artemisia frigida* and *Yucca glauca* are the most common shrubs.

Agate Fossil Beds National Monument
This community is dominated by mid and tall grasses 0.5-1.5 m tall, the most common being *Calamovilfa longifolia* and *Stipa comata*. In level valley bottoms and on floodplain terraces, *Pascopyrum smithii* may also be common. Small inclusions of upland disturbance (primarily gopher mounds) are common throughout ungrazed portions of this community and include *Artemisia frigida* and *Helianthus petiolaris*. Forb density and diversity is often fairly low in undisturbed examples of this community, among the more commonly encountered species are *Lactuca serriola, Lithospermum incisum, Lupinus plattensis, Lygodesmia juncea, Mirabilis hirsuta*, and *Tradescantia occidentalis*.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G3

RANK JUSTIFICATION

DATABASE CODE CEGL001469

COMMENTS
Agate Fossil Beds National Monument
On upper floodplain terraces, this community may intergrade with *Pascopyrum smithii* Herbaceous Vegetation. Heavily grazed examples of this community are often dominated by *Bouteloua gracilis* and are difficult to distinguished from similarly-grazed *Stipa comata - Bouteloua gracilis - Carex filifolia* Herbaceous Vegetation. The presence of large patches of *Calamovilfa longifolia* among the *Bouteloua gracilis* will distinguish this community from others.

REFERENCES
Hirsch, K. J. 1985. Habitat type classification of grasslands and shrublands of southwestern North Dakota. Ph. D. Thesis, North Dakota State University, Fargo. 281 p.

Johnston, B. C. 1987. Plant associations of regions two. R2-ECOL-87-2. USDA Forest Service, Rocky Mountain Region, Lakewood, CO. 429 p.